

EWM MODEL WITH ONLY INDEPENDENT ERRORS

	mean	sd	MC_error	val5.0pc	median	val95.0pc	start	sample
beta[1]	0.7629	0.1014	1.336E-4	0.5964	0.7631	0.9294	10001	600000
beta[2]	0.8414	0.181	4.618E-4	0.5443	0.8415	1.138	10001	600000
beta[3]	-1.023	0.181	4.627E-4	-1.32	-1.023	-0.7259	10001	600000
beta[4]	0.1294	0.1478	5.113E-4	-0.1139	0.1296	0.372	10001	600000
beta[5]	-0.2245	0.1596	5.677E-4	-0.4867	-0.2244	0.03814	10001	600000
beta[6]	0.7866	0.1034	2.975E-4	0.6171	0.7867	0.9564	10001	600000
beta[7]	1.053	0.05055	7.57E-5	0.97	1.053	1.136	10001	600000
beta[8]	0.6601	0.05052	7.669E-5	0.5772	0.6601	0.7431	10001	600000
beta[9]	0.4428	0.1349	4.256E-4	0.2218	0.4426	0.6647	10001	600000
beta[10]	-0.3308	0.07902	1.41E-4	-0.4606	-0.3307	-0.2013	10001	600000
beta[11]	0.4775	0.1381	4.39E-4	0.2508	0.4776	0.7049	10001	600000
sd.h[1]	0.6762	0.07156	9.421E-5	0.5702	0.67	0.8032	10001	600000
sd.h[2]	0.7808	0.08332	1.13E-4	0.6572	0.7736	0.9286	10001	600000
sd.h[3]	0.515	0.0557	8.037E-5	0.4325	0.5101	0.6138	10001	600000
sd.h[4]	0.3053	0.03262	4.366E-5	0.2569	0.3025	0.3631	10001	600000
sd.h[5]	0.4912	0.05313	7.598E-5	0.4127	0.4866	0.5856	10001	600000
tau.h[1]	2.259	0.4658	6.13E-4	1.55	2.227	3.075	10001	600000
tau.h[2]	1.695	0.3529	4.693E-4	1.16	1.671	2.315	10001	600000
tau.h[3]	3.901	0.8221	0.001183	2.654	3.842	5.345	10001	600000
tau.h[4]	11.09	2.312	0.003073	7.584	10.93	15.15	10001	600000
tau.h[5]	4.287	0.9039	0.001277	2.916	4.224	5.87	10001	600000

#DIC

	Dbar	Dhat	DIC	pD
aveelite	91.54	89.56	93.53	1.987
demstr	63.11	59.08	67.15	4.032
legideol	0.2831	-2.72	3.287	3.004
pid	105.9	102.9	108.9	3.002
policyli	57.96	53.94	61.99	4.022
total	318.8	302.8	334.9	16.05

Coda output:

Potential scale reduction factors:

	Point est.	Upper C.I.
beta[1]	1	1
beta[2]	1	1
beta[3]	1	1
beta[4]	1	1
beta[5]	1	1
beta[6]	1	1
beta[7]	1	1
beta[8]	1	1
beta[9]	1	1
beta[10]	1	1
beta[11]	1	1
sd.h[1]	1	1
sd.h[2]	1	1
sd.h[3]	1	1
sd.h[4]	1	1
sd.h[5]	1	1
tau.h[1]	1	1
tau.h[2]	1	1
tau.h[3]	1	1
tau.h[4]	1	1
tau.h[5]	1	1

Multivariate psrf

EWM WITH CAR ERRORS

	mean	sd	MC_error	val5.0pc	median	val95.0pc	start	sample
beta[1]	0.6033	0.1206	4.19E-4	0.4052	0.6036	0.8015	10001	600000
beta[2]	0.8221	0.2007	7.899E-4	0.4937	0.8218	1.152	10001	600000
beta[3]	-0.8485	0.2241	9.931E-4	-1.215	-0.8495	-0.4791	10001	600000
beta[4]	0.06182	0.1763	8.269E-4	-0.2279	0.06217	0.3506	10001	600000
beta[5]	-0.1247	0.191	9.073E-4	-0.4378	-0.1253	0.1898	10001	600000
beta[6]	0.6976	0.1201	4.502E-4	0.5007	0.6978	0.8948	10001	600000
beta[7]	1.066	0.09424	3.264E-4	0.9106	1.066	1.221	10001	600000
beta[8]	0.6652	0.08761	2.645E-4	0.5215	0.6651	0.8088	10001	600000
beta[9]	0.3687	0.1687	7.236E-4	0.09225	0.3688	0.6458	10001	600000
beta[10]	-0.2959	0.1217	4.666E-4	-0.4948	-0.2963	-0.0954	10001	600000
beta[11]	0.4933	0.168	7.046E-4	0.2178	0.4935	0.7687	10001	600000
psi[1]	0.5317	0.05618	1.901E-4	0.4329	0.5356	0.6172	10001	600000
psi[2]	0.4571	0.07716	3.71E-4	0.3256	0.4597	0.5798	10001	600000
psi[3]	0.4429	0.06102	2.231E-4	0.3405	0.4441	0.5416	10001	600000
psi[4]	0.3815	0.04503	1.158E-4	0.3081	0.3811	0.4562	10001	600000
psi[5]	0.4054	0.05777	1.976E-4	0.3111	0.4049	0.5014	10001	600000
sd.c[1]	0.5461	0.08363	2.934E-4	0.4092	0.5459	0.6842	10001	600000
sd.c[2]	0.5286	0.12	5.899E-4	0.3388	0.5247	0.7321	10001	600000
sd.c[3]	0.376	0.07696	3.016E-4	0.259	0.3709	0.5105	10001	600000
sd.c[4]	0.2298	0.04252	1.269E-4	0.1672	0.2261	0.3054	10001	600000
sd.c[5]	0.3255	0.06757	2.511E-4	0.2255	0.3196	0.4452	10001	600000
sd.h[1]	0.4784	0.06175	1.463E-4	0.3861	0.4734	0.5878	10001	600000
sd.h[2]	0.6204	0.08786	2.775E-4	0.485	0.6156	0.7725	10001	600000
sd.h[3]	0.4681	0.05628	1.149E-4	0.3839	0.4637	0.5675	10001	600000
sd.h[4]	0.3702	0.04089	7.143E-5	0.3094	0.3668	0.4426	10001	600000
sd.h[5]	0.4733	0.05598	1.075E-4	0.3893	0.469	0.5721	10001	600000

#DIC

	Dbar	Dhat	DIC	pD
aveelite	51.5	53.58	49.42	-2.082
demstr	48.83	48.74	48.93	0.09513

legideol	15.39	9.363	21.42	6.027
pid	83.04	73.35	92.72	9.685
policyli	50.35	65.63	35.06	-15.29
total	249.1	250.7	247.5	-1.561

DIC wins out in CAR model

Coda Output:

Potential scale reduction factors:

	Point est.	Upper C.I.
beta[1]	1	1
beta[2]	1	1
beta[3]	1	1
beta[4]	1	1
beta[5]	1	1
beta[6]	1	1
beta[7]	1	1
beta[8]	1	1
beta[9]	1	1
beta[10]	1	1
beta[11]	1	1
psi[1]	1	1
psi[2]	1	1
psi[3]	1	1
psi[4]	1	1
psi[5]	1	1
sd.c[1]	1	1
sd.c[2]	1	1
sd.c[3]	1	1
sd.c[4]	1	1
sd.c[5]	1	1
sd.h[1]	1	1
sd.h[2]	1	1

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sd.h[3]    1    1
sd.h[4]    1    1
sd.h[5]    1    1
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Multivariate psrf

1

LOTTO MODEL WITH INDEPENDENT FRAILTIES

	mean	sd	MC_error	val5.0pc	median	val95.0pcstart	sample
beta[1]	0.6096	0.4901	0.004958	-0.1845	0.6014	1.43 10001	600000
beta[2]	0.504	0.4564	0.004867	-0.224	0.4916	1.279 10001	600000
beta[3]	-0.004703	0.07475	0.002008	-0.1197	-0.00788	0.1307 10001	600000
beta[4]	-3.422	1.999	0.01736	-6.847	-3.347	-0.2447 10001	600000
beta[5]	0.1593	0.3702	0.002402	-0.4473	0.1611	0.7681 10001	600000
beta[6]	-0.1271	0.03111	6.22E-4	-0.1786	-0.1267	-0.0763 10001	600000
beta[7]	0.5193	0.1705	0.002252	0.2399	0.5183	0.7999 10001	600000
beta[8]	0.05508	0.02704	6.441E-4	0.008679	0.05586	0.09814 10001	600000
beta[9]	-0.02823	0.01015	7.321E-5	-0.04531	-0.02792	-0.0120 10001	600000
constant	-2.283	2.855	0.07713	-7.471	-2.14	2.065 10001	600000
sd.c	1.287	0.1243	8.193E-4	1.086	1.285	1.495 10001	600000

#DIC

	Dbar	Dhat	DIC	pD
adopt	295.0	266.8	323.2	28.2
total	295.0	266.8	323.2	28.2

Coda Output:

Potential scale reduction factors:

	Point est.	Upper C.I.
beta[1]	1.00	1.01
beta[2]	1.00	1.01

beta[3]	1.12	1.37
beta[4]	1.01	1.02
beta[5]	1.00	1.00
beta[6]	1.03	1.10
beta[7]	1.00	1.01
beta[8]	1.08	1.24
beta[9]	1.00	1.01
constant	1.12	1.38
sd.c	1.00	1.00

Multivariate psrf

1.08

LOTTO MODEL WITH CAR FRAILTIES

	mean	sd	MC_error	val5.0pc	median	val95.0pc	start	sample
beta[1]	0.5633	0.4922	0.006028	-0.2246	0.5542	1.388	10001	600000
beta[2]	0.5017	0.4607	0.00554	-0.2354	0.4916	1.28	10001	600000
beta[3]	0.05112	0.06662	8.58E-4	-0.0601	0.05181	0.1593	10001	600000
beta[4]	-3.343	2.045	0.02499	-6.817	-3.274	-0.08333	10001	600000
beta[5]	0.1383	0.3791	0.004863	-0.4904	0.1421	0.7553	10001	600000
beta[6]	-0.103	0.03259	4.38E-4	-0.1584	-0.102	-0.05092	10001	600000
beta[7]	0.08812	0.1866	0.002573	-0.2188	0.08683	0.3978	10001	600000
beta[8]	0.06677	0.02573	3.192E-4	0.0249	0.06652	0.1095	10001	600000
beta[9]	-0.037280	0.01109	1.111E-4	-0.05607	-0.0369	-0.01963	10001	600000
constant	-3.577	2.463	0.03134	-7.617	-3.601	0.4939	10001	600000
sd.c	1.583	0.2525	0.002941	1.195	1.568	2.023	10001	600000

#DIC

	Dbar	Dhat	DIC	pD
adopt	298.3	287.7	309.0	10.63
total	298.3	287.7	309.0	10.63

###DIC wins out in CAR model

Coda output:

Potential scale reduction factors:

	Point est.	Upper C.I.
beta[1]	1	1.01
beta[2]	1	1.00
beta[3]	1	1.00
beta[4]	1	1.00
beta[5]	1	1.00
beta[6]	1	1.00
beta[7]	1	1.01
beta[8]	1	1.00
beta[9]	1	1.00
constant	1	1.00
sd.c	1	1.01

Multivariate psrf

1

###MARGALIT WITH INDEPENDENT STATE RANDOM EFFECTS ###

mean	sd	MC_error	val5.0pc	median	val95.0pc	start	sample
b[1]	0.04187	0.01088	2.05E-05	0.024	0.04186	0.05977	10001 600000
b[2]	-0.006045	0.009645	1.56E-05	-0.02191	-0.006041	0.009816	10001 600000
b[3]	9.03E-06	0.01059	1.87E-05	-0.01744	6.58E-06	0.01743	10001 600000
b[4]	0.01786	0.008988	1.18E-05	0.003076	0.01786	0.03265	10001 600000
b[5]	0.5883	0.01175	2.25E-05	0.569	0.5883	0.6076	10001 600000
b[6]	0.1706	0.01486	3.84E-05	0.1462	0.1706	0.1951	10001 600000
b[7]	-0.1217	0.01417	3.57E-05	-0.1449	-0.1216	-0.09832	10001 600000
b[8]	0.002803	0.009732	1.91E-05	-0.01319	0.002799	0.01881	10001 600000
b[9]	-0.00539	0.009052	1.26E-05	-0.02028	-0.0054	0.009496	10001 600000
b[10]	0.008623	0.01789	6.12E-05	-0.02077	0.008602	0.03809	10001 600000
b[11]	0.006761	0.01599	5.25E-05	-0.01954	0.006775	0.03307	10001 600000
b[12]	0.02565	0.009517	1.45E-05	0.009976	0.02565	0.04126	10001 600000
b[13]	0.009146	0.01233	2.91E-05	-0.0111	0.009156	0.02944	10001 600000

b[14]	0.004883	0.009669	1.53E-05	-0.01101	0.004882	0.02078	10001600000
b[15]	-0.00837	0.009977	1.90E-05	-0.02487	-0.00831	0.007935	10001600000
b[16]	0.006468	0.009341	1.38E-05	-0.008892	0.006465	0.02185	10001600000
b[17]	0.001293	0.009277	1.35E-05	-0.01393	0.001283	0.01658	10001600000
b[18]	-0.0182	0.008953	1.16E-05	-0.03293	-0.01819	-0.003507	10001600000
b[19]	-0.004735	0.008933	1.21E-05	-0.01943	-0.004745	0.009983	10001600000
b[20]	-0.02229	0.008976	1.18E-05	-0.03704	-0.0223	-0.007523	10001600000
b[21]	-0.01888	0.008993	1.19E-05	-0.03368	-0.01889	-0.004075	10001600000
b[22]	0.002601	0.0089	1.18E-05	-0.01205	0.002595	0.01721	10001600000
b[23]	0.01651	0.009127	1.32E-05	0.001504	0.01652	0.03154	10001600000
b[24]	0.01427	0.009872	1.67E-05	-0.001945	0.01427	0.03054	10001600000
b[25]	0.0115	0.009578	1.45E-05	-0.00424	0.0115	0.02725	10001600000
b[26]	0.01206	0.01089	2.09E-05	-0.005854	0.01205	0.03001	10001600000
b[27]	0.01002	0.009528	1.46E-05	-0.005628	0.01	0.02568	10001600000
b[28]	0.001521	0.01152	2.61E-05	-0.01746	0.001519	0.02046	10001600000
var.h	0.3541	0.007496	9.94E-06	0.342	0.354	0.3667	10001600000
var.s	0.001148	7.42E-04	3.90E-06	3.44E-04	9.61E-04	0.002581	10001600000
var.w	0.002927	0.01184	1.55E-05	3.78E-04	0.001343	0.008738	10001600000

Dbar	Dhat	DIC	pD
8109	8069	8150	40.53
8109	8069	8150	40.53

Coda output:

Potential scale reduction factors:

	Point est.	Upper C.I.
b[1]	1.00	1.00
b[2]	1.00	1.00
b[3]	1.00	1.00
b[4]	1.00	1.00
b[5]	1.00	1.00
b[6]	1.00	1.00
b[7]	1.00	1.00
b[8]	1.00	1.00
b[9]	1.00	1.00

b[10]	1.00	1.00
b[11]	1.00	1.00
b[12]	1.00	1.00
b[13]	1.00	1.00
b[14]	1.00	1.00
b[15]	1.00	1.00
b[16]	1.00	1.00
b[17]	1.00	1.00
b[18]	1.00	1.00
b[19]	1.00	1.00
b[20]	1.00	1.00
b[21]	1.00	1.00
b[22]	1.00	1.00
b[23]	1.00	1.00
b[24]	1.00	1.00
b[25]	1.00	1.00
b[26]	1.00	1.00
b[27]	1.00	1.00
b[28]	1.00	1.00
var.h	1.00	1.00
var.s	1.00	1.00
var.w	1.01	1.01

Multivariate psrf

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MARGALIT WITH CAR STATE RANDOM EFFECTS

mean	sd	MC_error	val5.0pc	median	val95.0pc	start	sample
b[1]	0.04203	0.01088	2.04E-05	0.02417	0.04202	0.05993	100016
b[2]	-0.006067	0.009647	1.56E-05	-0.02194	-0.006064	0.009789	100016
b[3]	-1.34E-04	0.01059	1.83E-05	-0.01758	-1.38E-04	0.01727	100016

b[4]	0.01773	0.008986	1.18E-05	0.002941	0.01774	0.03252	100016
b[5]	0.5885	0.01175	2.25E-05	0.5692	0.5885	0.6079	100016
b[6]	0.1706	0.01485	3.83E-05	0.1462	0.1706	0.1951	100016
b[7]	-0.1218	0.01417	3.54E-05	-0.1451	-0.1218	-0.09844	100016
b[8]	0.00274	0.009732	1.90E-05	-0.01325	0.002729	0.01874	100016
b[9]	-0.005217	0.009057	1.26E-05	-0.02011	-0.005227	0.00968	100016
b[10]	0.008701	0.01788	6.06E-05	-0.02066	0.00867	0.03814	100016
b[11]	0.006904	0.01599	5.21E-05	-0.01939	0.0069	0.0332	100016
b[12]	0.02558	0.009497	1.45E-05	0.009935	0.02559	0.04118	100016
b[13]	0.009294	0.01232	2.92E-05	-0.01097	0.009312	0.02959	100016
b[14]	0.004995	0.009664	1.52E-05	-0.01088	0.004999	0.02089	100016
b[15]	-0.005591	0.009544	1.69E-05	-0.02135	-0.005557	0.01006	100016
b[16]	0.00612	0.009324	1.37E-05	-0.009205	0.006122	0.02147	100016
b[17]	0.001081	0.009251	1.34E-05	-0.01411	0.001068	0.01633	100016
b[18]	-0.01839	0.008949	1.18E-05	-0.03312	-0.01838	-0.003699	100016
b[19]	-0.004739	0.008925	1.19E-05	-0.01942	-0.004749	0.009965	100016
b[20]	-0.02257	0.00898	1.17E-05	-0.03732	-0.02258	-0.007785	100016
b[21]	-0.01883	0.008999	1.20E-05	-0.03363	-0.01884	-0.004013	100016
b[22]	0.002818	0.008895	1.17E-05	-0.01183	0.002816	0.01742	100016
b[23]	0.01679	0.009125	1.31E-05	0.001777	0.01679	0.03181	100016
b[24]	0.01462	0.009856	1.66E-05	-0.001589	0.01461	0.03085	100016
b[25]	0.0117	0.009577	1.45E-05	-0.004017	0.0117	0.02747	100016
b[26]	0.01234	0.01088	2.08E-05	-0.005559	0.01232	0.03028	100016
b[27]	0.01011	0.00952	1.45E-05	-0.005541	0.01009	0.02575	100016
b[28]	0.00174	0.01152	2.59E-05	-0.01723	0.001746	0.02066	100016
var.h	0.3543	0.007497	9.90E-06	0.3422	0.3542	0.3669	100016
var.p	0.001435	0.001156	7.17E-06	3.66E-04	0.001102	0.003626	100016
var.w	0.002865	0.01166	1.53E-05	3.73E-04	0.001317	0.008552	100016

Dbar	Dhat	DIC	pD	
	8112	8084	8141	28.35
	8112	8084	8141	28.35

#DIC wins in CAR model

Coda output:

Potential scale reduction factors:

Point est. Upper C.I.

b[1]	1	1
b[2]	1	1
b[3]	1	1
b[4]	1	1
b[5]	1	1
b[6]	1	1
b[7]	1	1
b[8]	1	1
b[9]	1	1
b[10]	1	1
b[11]	1	1
b[12]	1	1
b[13]	1	1
b[14]	1	1
b[15]	1	1
b[16]	1	1
b[17]	1	1
b[18]	1	1
b[19]	1	1
b[20]	1	1
b[21]	1	1
b[22]	1	1
b[23]	1	1
b[24]	1	1
b[25]	1	1
b[26]	1	1
b[27]	1	1
b[28]	1	1
var.h	1	1
var.p	1	1
var.w	1	1

Multivariate psrf

1

CLEAN AIR MODEL WITH INDEPENDENT RANDOM EFFECTS

	mean	sd	MC_error	val5.0pc	median	val95.0pc	start	sample
beta[1]	0.07088	0.005092	1.17E-4	0.06243	0.07092	0.07915	10001	600000
beta[2]	0.05723	0.004211	8.915E-5	0.05022	0.05731	0.06404	10001	600000
beta[3]	0.02218	0.004637	1.024E-4	0.0145	0.02212	0.02989	10001	600000
beta[4]	0.00395	0.003756	7.367E-5	-0.0022	0.00397	0.0101	10001	600000
beta[5]	0.1836	0.01024	2.579E-4	0.1667	0.1838	0.1999	10001	600000
beta[6]	0.02777	0.002906	5.375E-5	0.02298	0.02777	0.03253	10001	600000
beta[7]	0.00139	0.003621	7.293E-5	-0.00458	0.001410	0.00731	10001	600000
constant	5.738	0.3088	0.008428	5.095	5.804	6.176	10001	600000
r	0.699	0.004151	6.689E-5	0.6922	0.699	0.7059	10001	600000
sd.c	0.9755	0.01049	1.51E-4	0.9587	0.9753	0.9932	10001	600000

#DIC

	Dbar	Dhat	DIC	pD
stateAct	40290.0	40230.0	40350.0	57.83
total	40290.0	40230.0	40350.0	57.83

Coda output:

Potential scale reduction factors:

	Point est.	Upper C.I.
beta[1]	1.01	1.02
beta[2]	1.00	1.00
beta[3]	1.01	1.05
beta[4]	1.00	1.01
beta[5]	1.02	1.07
beta[6]	1.00	1.01
beta[7]	1.00	1.00

```

constant  2.06  4.53
r         1.00  1.00
sd.c     1.00  1.01

```

```

Multivariate psrf
1.67

```

CLEAN AIR MODEL WITH CAR RANDOM EFFECTS

	mean	sd	MC_error	val5.0pc	median	val95.0pc	start	sample
beta[1]	0.07048	0.00608	1.136E-4	0.06041	0.07045	0.08043	10001	600000
beta[2]	0.05727	0.00516	8.392E-5	0.04876	0.0573	0.06573	10001	600000
beta[3]	0.02191	0.00563	1.026E-4	0.0127	0.02189	0.03125	10001	600000
beta[4]	0.00378	0.00449	7.335E-5	-0.003670	0.00379	0.01118	10001	600000
beta[5]	0.1858	0.01282	3.018E-4	0.1642	0.1861	0.2069	10001	600000
beta[6]	0.02775	0.00353	4.86E-5	0.02193	0.02773	0.03354	10001	600000
beta[7]	0.00152	0.00441	7.312E-5	-0.005750	0.00152	0.008856	10001	600000
constant	5.901	0.01383	1.971E-4	5.878	5.901	5.923	10001	600000
r	0.699	0.00525	7.088E-5	0.6904	0.699	0.7076	10001	600000
sd.c	0.9745	0.01122	1.621E-4	0.9565	0.9743	0.9933	10001	600000

#DIC

	Dbar	Dhat	DIC	pD
stateAct	40300.0	40320.0	40280.0	-18.78
total	40300.0	40320.0	40280.0	-18.78

#DIC wins in CAR model

Coda output:

Potential scale reduction factors:

	Point est.	Upper C.I.
beta[1]	1.00	1.01
beta[2]	1.00	1.00

beta[3]	1.01	1.02
beta[4]	1.00	1.00
beta[5]	1.01	1.02
beta[6]	1.00	1.01
beta[7]	1.00	1.01
constant	1.00	1.00
r	1.00	1.00
sd.c	1.00	1.01

Multivariate psrf

1.01